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**S-3700 & S-3701  
RIVERWOOD SUBDIVISION, PHASE I AND II  
Minor-Sketch Plan**

**STAFF REPORT  
June 30, 2005**

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**REQUEST MADE, PROPOSED USE, LOCATION:**

Petitioner and property owner, Ronald L. Kerber, (with his surveyor, Tim Beyer from Vester & Associates) is seeking primary approval for two proposed minor subdivisions separated by approximately 1000 feet: a 3-lot subdivision on 7.35 acres known as Phase II, and a 4-lot subdivision on 5.93 acres known as Phase I, located on the south side of Division Road, just east of the Kerber Road intersection, Shelby 25 (NW) and 26 (NE) 23-6.

**AREA ZONING PATTERNS:**

The property in question is zoned AW, Agricultural Wooded as is all surrounding land. Flood Plain zoning associated with the Wabash River and Indian Creek exist farther to the south and east; PDMX zoning associated with The Ravines golf course and residential development is farther to the west.

Petitioner's property has four parent tracts that have not been previously parcelized or subdivided. Two of them, located near the Division Road/Kerber Road intersection, are small enough (1.61 and 1.36 acres) to be unable to be further divided. The other two parent tracts are 68.66 acres and 14.9 acres in area. The two phases of this subdivision will use 7 of the available 8 development rights. The area used within these two phases amounts to 13.28 acres; this would leave a little over 70 acres, which staff believes will be divided into 7 exemption "A" tracts of 10 acres each.

**AREA LAND USE PATTERNS:**

Over 50% of the two parent tracts is heavily wooded and steeply sloped. Most of the land included within Phase I is relatively level, open field. Lot 2 is relatively flat; Lots 3 and 4 have a deep, heavily wooded ravine adjacent to the west with just a small portion of the slope within their lot lines. Lot 1 has a 25 to 35 foot slope along its north and east side; the rest of the lot is level. Over ½ of the area within Lot 1 is wooded. The lots are currently unimproved. All four of these lots meet the ordinance standards for "flag lots" with 20' "poles" connecting them to Division Road.

Approximately ½ of the land within Phase II is heavily wooded and steeply sloped. Lots 5, 6 and 7 would all gain access by the same ingress-egress easement utilized by the lots in Phase I. Lots 6 and 7 have road frontage on Division, although the steepness of the slope prevents the lots from gaining direct access from the county road. Lot 5 is another "flag lot" with a 20' tail that wraps around Lot 6 and connects the lot to Division Road. These lots are also unimproved.

**TRAFFIC AND TRANSPORTATION:**

The County *Thoroughfare Plan* classifies Division Road as a secondary arterial. The Phase I sketch plan has the sole entrance for the two phases of this subdivision directly opposite existing Kerber Road. In order for these subdivision requests to be heard, written approval of the driveway location from the County Highway Department must be submitted. This is necessary for these requests because if the location is not approved, all of the four lots within Phase I will need to be relocated and the sketch plan would have to be resubmitted.

The 40' wide required right-of-way to be dedicated is shown on the sketch plan. A "no vehicular access" statement has also been shown along the frontages of Lots 5, 6, and 7; this NVA statement will be a condition of final plat approval.

**ENVIRONMENTAL AND UTILITY CONSIDERATIONS:**

Two letters from the County Health Department addressing all seven of the proposed lots state that, "these lots can be considered for the installation of shallow trench subsurface absorption system with perimeter drains. All lots have adequate outlets for the tiles to lower seasonal water tables."

The County Surveyor is now requiring that all minor subdivisions receive either County Drainage Board approval or the approval of the Surveyor's Office. Because of the unique characteristics of this property, staff met with the County Surveyor to discuss the two proposals. Because the site contains sloping terrain, and highly erodible soils, the County Surveyor is requiring additional information for the two phases of this subdivision including providing the locations of all building sites, as well as Health Department-approved locations for septic fields and secondary septic fields.

In a letter from the Division of Soil Conservation, several recommendations were given to help minimize increased soil erosion including the following two suggestions:

*Work with a construction firm that has experience working with these soils and ensure implementation of all design components of the Erosion & Sediment Control Plan;*

*Consider working with a landscape architect and/or a professional horticulturalist for selection of various vegetative covers that will flourish in these soils, while not intruding or introducing invasive species to the ecosystem.*

**CONFORMANCE WITH UZO REQUIREMENTS:**

Setbacks shown are correct; no buffering is required. Lot width and area are sufficient.

Because of the sensitive nature of this site, two sections of the USO are particularly applicable. The first is Section 5.10 *Preservation of Natural Features and Amenities*, which states that, "Existing features which would add value to residential development or to the participating jurisdiction as a whole, such as trees, watercourses...historic spots, and similar irreplaceable assets, shall be preserved wherever possible, in the design of the subdivision."

The second section is USO 5.1 (6) *Character of the Land*, which states that, "Land which the Commission finds to be unsuitable for subdivision because of...steep slopes...adverse earth formations or topography...or other features which will reasonably be harmful to the safety, health, and general welfare of the present or future inhabitants of the subdivision and/or its surrounding areas, shall not be subdivided unless adequate methods are formulated by the developer and approved by the Commission to solve the problems created by the unsuitable land conditions."

The "methods formulated by the developer" include building setbacks located halfway between the bottom and the tops of the ravine banks to prevent construction of homes on the hillsides. Also, a statement has now been placed on the sketch plan that reads, "Stormwater pollution prevention measures may be required on individual lots at the discretion of the County Surveyor. In the event that an individual lot owner desires to place a walkout basement or other similar structure over an existing hillside, appropriate individual lot controls shall be submitted to the County Surveyor on a site plan prepared by a land surveyor or professional engineer licensed in the State of Indiana."

#### **STAFF COMMENTS:**

Petitioner originally had filed a Planned Development rezone of this property (Z-2232). Staff had numerous concerns with the development plans proposed at that time, including the highly erodible soils on site, and the steepness of the slopes. Petitioner chose to withdraw the proposed PD and instead develop the site with two minor subdivisions. This would limit the number of lots that could be generated on site (The proposed PD had 28; these subdivisions and 10 acre tracts would create 14.) but also limits the amount of input staff has in any proposed development.

Not too long ago, a narrow strip of petitioner's land perpendicular from Division Road going straight up the hillside was clear-cut of all vegetation. (This strip is actually the "flag pole" of proposed Lot 5 of Phase II.) The continuing erosion of the soil in this strip of ground is clearly evident and raises a red flag to staff regarding the suitability of this site for home and roadway construction. Although there are no soil scientists on staff, according to the *Soil Survey of Tippecanoe County, Indiana* produced by the USDA, two of the three soils found in this area, particularly on Phase II, are questionably unsuitable for building.

One type of soil present on site is Strawn-Rodman complex (SyF). According to the Soil Survey, this soil, "consists of moderately steep to very steep soils on breaks of till plains." The book continues with, "These soils are poorly suited to trees. The main management concerns are the hazard of erosion..." "Using selective cutting rather than clear cutting, establishing...roads on the contour, and preserving as much understory vegetation as possible help to control erosion." Regarding subdivision development, the survey states, "Because of the slope, these soils are generally unsuited to use as sites for dwellings and are severely limited as sites for local roads and streets."

The second type of soil present on site is Crosby-Miami complex (CwB2). According to the Soil Survey, "the wetness is a severe limitation if the Crosby soil is used as a site for dwellings. Installing subsurface drains helps to lower the water table. Constructing buildings on raised, well-compacted fill material also helps to overcome the wetness.

The shrink-swell potential is a moderate limitation if the Miami soil is used as a site for dwellings. Foundations, footings, and basement walls should be strengthened. Backfilling with coarser material helps to prevent the structural damage caused by shrinking and swelling of the soil. Because of low strength, both soils are severely limited as sites for local roads and streets.”

Staff does not believe the methods formulated by the developer mentioned above are adequate to protect future property owners. This office received the revised sketch plan outlining the developer’s methods less than 24 hours ago as of the writing of this report. Based on this cursory look at the submittal, staff feels more should be done:

- Written approval from the County Highway Department of the driveway location must be submitted;
- The locations of all building sites, as well as Health Department-approved locations for septic fields and secondary septic fields should be submitted to the County Surveyor’s Office as well as to staff;
- Setbacks should be shown at the top of the bank at the minimum, instead of halfway down each bank;
- A plan should be created showing how the clear-cut strip of ground will be stabilized to prevent additional erosion.

**STAFF RECOMMENDATION:**

Continuance, until another sketch plan review meeting can be set up with staff and the County Surveyor and Health Department to discover ways to meet Section 5.1 (6) of the Unified Subdivision Ordinance so that staff can recommend approval of these submittals.